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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,902

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Ekkehard Roth

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EXAMINER

HUDA, SAEED M

ART UNIT

PAPER NUMBER

1791

NOTIFICATION DATE

DELIVERY MODE

05/15/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/575,902	Applicant(s) ROTH, EKKEHARD	
	Examiner SAEED M. HUDA	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) 14-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The response filed on 04/02/2009 has been fully considered and entered into the record.
2. Newly submitted claims 14-20 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the original claims presented were directed to a method for producing a fiber-composite material while newly submitted claims 14-20 are directed to a fiber composite material. There would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:
 - (a) the inventions have acquired a separate status in the art in view of their different classification;
 - (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
 - (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
 - (d) the prior art applicable to one invention would not likely be applicable to another invention;

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 14-20 are withdrawn from consideration

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as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

3. New claim 13 has been entered and the rejection of claims 1-9 and 11-12 under 35 USC § 101 and 35 USC § 112 and objection to the abstract have been withdrawn due to appropriate correction by applicant.

Claim of Foreign Priority

4. The claim to foreign priority is acknowledged and a certified copy of foreign priority was received on 03/18/2009.

Response to Arguments

5. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection, to the extent that the arguments are applicable to the new grounds of rejection; they are addressed below.

6. Applicant states that none of the documents used in the rejection of record disclose that the filler comprises at least one of a ground and cut reinforcement fibers so that the filler comprises a same material as the reinforcement fibers; however, said argument is not persuasive in that Skinner et al. teach Skinner et al. disclose a method of molding a high density composite article which is composed of fiber reinforcement, resinous material, and fillers (abstract and [0005]) that can be particulate (ground) or chopped strands ([0019]) where the resinous material is loaded with a filler ([0005]) (page 2 of Office Action).

Applicant goes on to state that filler size is not a result effective variable, but has not provided evidence to the contrary (i.e. any evidence of unexpected results).

Applicant states that Skinner in view of Taylor is used in the rejection of claims 5-6 and 11-12 and that Skinner in view of Taylor would not form Applicant's claimed subject matter at hand; however, Applicant fails to provide any argument to support this.

Applicant states that Skinner in view of Muser does not provide for the invention of Applicant, but this is not found persuasive because Skinner in view of Muser provide for a modified invention that read on the claimed subject matter (see page 4 of the Office Action).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. Claims 1-2 and 4 are rejected under 35 U.S.C. 102(a) as being anticipated by Skinner et al. (US 2004/0130067 A1).

a. Regarding claims 1 and 4, Skinner et al. disclose a method of molding a high density composite article which is composed of fiber reinforcement, resinous material, and fillers (abstract and [0005]) (fiber-composite article composed of fibers, resin, and fillers) that can be particulate (ground) or chopped strands (cut) ([0019]) where the resinous material is loaded with a filler ([0005]) (forming resin filler mixture). Skinner et al. teach that the filler may be hollow microspheres of glass ([0008]) and the fibers may be glass ([0025]) (i.e. filler comprises a same material as the reinforcement fibers).

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- b. Regarding claims 2, Skinner et al. teach the aggregate will have a particle size in the range of 0.05 mm to 5 mm ([0017]).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3, 5-6, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner et al. (US 2004/0130067 A1) as applied to claim 1 above, and further in view of Taylor et al. (US 6461457 B1).

- a. Regarding claim 3, Skinner et al. fail to explicitly teach the fiber size.

Taylor et al. teach a method of producing an elastic article formed into film shape (abstract) where said article can be loaded with fillers (column 2, lines 20-27).

Taylor et al. go on to teach that the thinned elastic article of the invention may be bonded to wovens, nonwovens, knits, nets, foam-like materials, paper, and tissue, thereby forming a laminate structure (column 8, lines 49-55). Thus, forming a product similar to that of Skinner et al.

Taylor et al. go on to teach that the fibers have an average diameter of 10 microns to 30 microns (column 3, lines 1-10). It would have been obvious to one having ordinary skill in the art at the time of the invention to use this fiber size in the invention of Skinner et al. because said fiber is of a size that can, after being

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meltblown, easily be carried in a high velocity air stream to be deposited on a collecting surface to a web (column 3, lines 15-25).

b. Regarding claim 5, Skinner et al. fail to teach that the resin filler mixture is processed into a film.

Taylor et al. teach a method for producing a stretch-thinned elastic article where said article is formed from a thermoplastic block copolymer that is melt-processed into a stretchable article such as a film. Said film articles if is made and formed of thermoplastic block copolymer loaded with a filler (column 2, lines 21-29). It would have been obvious to one having ordinary skill in the art at the time of the invention to process the resin filler mixture into a film because films produced by this method are suitable for durable and disposable articles (abstract).

c. Regarding claims 6 and 11, Skinner et al. fail to teach that the resin filler mixture is applied to a semi-finished textile product that is in a form found in the claim.

Taylor et al. teach that the stretch-thinned articles (films) produced in accordance with the method of this invention may be bonded to facing materials including wovens, nonwovens, knits, nets, foam-like materials, paper, and tissue, thereby forming a laminate structure (column 8, lines 49-55) (semi-finished textiles structures). It would have been obvious to one skilled in the art at the time of the invention to use the film forming process of Taylor et al. in the

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invention of Skinner et al. because the film is dimensionally stable overtime and at elevated temperatures (column 2, lines 1-3), so shrinkage will not be an issue.

d. Regarding claim 13, the rejection for claims 2 and 3 above provide logic and reasoning for this rejection.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner et al. (US 2004/0130067 A1) as applied to claim 6 above, and further in view of Muser et al. (US 4556529).

Skinner et al. fail to teach the use of a mold to process layered components or that the resin filler mixture comprises a preform.

Muser et al. teach a method for bonding molded components (semi-finished textile products) to film, sheeting, or shaped members in which the molded element constitutes plastic resin and filler, and is bonded to the sheeting or member. Muser et al. go on to teach that the sheeting or film is introduced into a mold and processed (abstract). The resin filler film can be in preform form. In the creation of a product that has resin filler film “skins”, it would necessarily follow that the resin filler film would need to be introduced into the mold prior to the textile product. It would have been obvious to one skilled in the art at the time of the invention to use the mold and layered molding method to process the modified invention of Skinner et al. because such a method can be carried out simply and rapidly in production applications (column 1, lines 50-55).

12. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner et al. (US 2004/0130067 A1) as applied to claim 1 above, and further in view of Minami et al. (US 3962009).

Skinner et al. fail to teach the use wherein the fiber composite material is applied into a component mold or onto a semi-finished textile product in a spray method or that the sprayed product is used for producing performs.

Minami et al. teach a method to apply a coat layer onto a composite materials where a resin composition mixed with a filler is spray coated (spray method) onto the composite. (column 11, lines 26-32). It would have been obvious to one skilled in the art at the time of the invention to use a spray method in the invention of Skinner et al. the spray method, as compared to a brush or roll method, does not require that the surface of the sample see pressure (i.e. with use of a brush or roll method, the surface of the sample will be subjected to force from the motion of brush or roll application; however, with a spray method, this is avoided).

13. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner et al. (US 2004/0130067 A1) in view of Minami et al. (US 3962009) as applied to claim 8 above, and further in view of Zion (US 4025686).

Zion teach a resinous article and method for making said article where a body of fibrous reinforcing material and syntactic foam containing a low density filler are placed in a mold (abstract). The resulting article has an outer skin, a layer of fibrous reinforcing material beneath the skin bonded to the skin (abstract).

Zion teaches that almost any type of fibrous reinforcing material can be used to provide added strength to the finished article. However, it has been found in practice that a reinforcing material made from glass fibers is especially useful in making such molded articles. The glass fibers can be in a variety of forms when used to reinforce the

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resinous liquid. Continuous strand mats, chopped strand mats, chopped roving and preforms can all be used when a glass fiber material is used as the reinforcing material. However, the glass fibers or other reinforcing material should not be loose but they should be in a matrix form like a sheet or preform (column 6, lines 1-20). It would have been obvious to one having ordinary skill in the art at the time of the invention to produce preforms because this will allow the reinforcing material to adhere to the molds so it does not move out of position during the molding operation (column 6, lines 1-20).

14. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner et al. (US 2004/0130067 A1) in view of Muser et al. (US 4556529) as applied to claim 7 above, and further in view of Zion (US 4025686).

Skinner et al. in view of Muser et al. are silent with regards to the resin filler film comprising a preform. Zion teaches a process where a resinous article, specifically said article is a composite type with made using a core and outer skins (abstract). In creation of said article, Zion teaches that continuous strand mats, chopped strand mats, chopped roving and preforms can all be used when a glass fiber material is used as the reinforcing material. However, the glass fibers or other reinforcing material should not be loose but they should be in a matrix form like a sheet or preform (column 6, lines 1-20). It would have been obvious to one having ordinary skill in the art at the time of the invention to produce preforms because this will allow the reinforcing material to adhere to the molds so it does not move out of position during the molding operation (column 6, lines 1-20).

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAEED M. HUDA whose telephone number is (571)270-5514. The examiner can normally be reached on 8:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SAEED M. HUDA/
Examiner, Art Unit 1791
/ Carlos Lopez/
Primary Examiner, Art Unit 1791